

CLAIMS

1. A floor underlayment material, comprising
a foam web including a polymer matrix and a multiplicity of voids dispersed throughout said polymer matrix, said foam web extending in a length direction and having first and second surfaces and a plurality of spaced ribs projecting from said first surface and oriented in said length direction; and

a film disposed on said second surface of said foam web.

2. The floor underlayment material as claimed in claim 1, wherein said film is formed from a polymer.

3. The floor underlayment material as claimed in claim 2, wherein said polymer is a polyolefin.

4. The floor underlayment material as claimed in claim 2, wherein said polymer matrix in said foam web is formed from substantially the same polymer as said film.

5. The floor underlayment material as claimed in claim 4, wherein said film is formed from polyethylene and said polymer matrix in said foam web is formed from polyethylene.

6. The floor underlayment material as claimed in claim 1, wherein said film has a thickness between about 0.25 mils and about 20 mils.

7. The floor underlayment material as claimed in claim 1, wherein said foam web has a density between about 0.5 lb/ft³ and about 15 lb/ft³.

8. The floor underlayment material as claimed in claim 7, wherein said foam web has a density of less than about 10 lb/ft³.

9. The floor underlayment material as claimed in claim 1, wherein said foam web is formed from low density polyethylene.

10. The floor underlayment material as claimed in claim 9, wherein said film is formed from high density polyethylene.

11. The floor underlayment material as claimed in claim 1, wherein said foam web has a predetermined thickness between said first and second surfaces, and said ribs project from said first surface by a height dimension, said height dimension being greater than said predetermined thickness.

12. The floor underlayment material as claimed in claim 11, wherein said height dimension is at least about twice as large as said predetermined thickness.

13. The floor underlayment material as claimed in claim 1, wherein said foam web has a thickness between said first and second surfaces of between about 0.01 inches and 1.50 inches.

14. The floor underlayment material as claimed in claim 11, wherein said foam web has an overall thickness including said predetermined thickness and said height dimension of between about 0.02 inches and about 4 inches.

15. The floor underlayment material as claimed in claim 1, wherein each of said ribs has a width at a junction with said first surface, and each of said ribs is separated from an adjacent one of said ribs by at least said width.

16. The floor underlayment material as claimed in claim 1, wherein said foam web includes at least one additive selected from the group consisting of antioxidants, colorants, anti-corrosion agents, anti-bacterial agents, anti-microbial agents, anti-fungal agents, anti-static agents, UV stabilizers, fire retardants, fire resistants, fillers, reinforcements, biostabilizers and pigments.

17. The floor underlayment material as claimed in claim 1, wherein said film includes at least one additive selected from the group consisting of antioxidants, anti-corrosion agents, anti-bacterial agents, anti-microbial agents, anti-fungal agents, anti-static agents, UV

stabilizers, fire retardants, fire resistants and biostabilizers.

18. The floor underlayment material as claimed in claim 1, wherein said ribs have a generally triangular cross-sectional shape.

19. The floor underlayment material as claimed in claim 1, wherein at least a portion of said ribs extend continuously in said length direction, and at least another portion of said ribs are discontinuous.

20. The floor underlayment material as claimed in claim 1, further comprising another film disposed on free edges of said ribs.

21. The floor underlayment material as claimed in claim 20, wherein said another film is formed from high density polyethylene.

22. The floor underlayment material as claimed in claim 20, wherein said another film is formed from the same material as said film.

23. A flooring system, comprising
a subfloor;
finish flooring arranged above said subfloor;
and

a floor underlayment material disposed between said subfloor and said finish flooring, said floor underlayment material including a foam web including a polymer matrix and a multiplicity of voids dispersed throughout said polymer matrix, said foam web extending in a length direction and having first and second surfaces and a plurality of spaced ribs projecting from said first surface and oriented in said length direction, and a film disposed on said second surface of said foam web.

24. The flooring system as claimed in claim 23, wherein said film is disposed adjacent said subfloor.

25. The flooring system as claimed in claim 24, wherein said floor underlayment material is oriented so that said ribs face toward said finish flooring, thereby defining a

multiplicity of elongated channels between said finish flooring and said floor underlayment material.

26. The flooring system as claimed in claim 23, wherein said film is disposed adjacent said finish flooring.

27. The flooring system as claimed in claim 26, wherein said floor underlayment material is oriented so that said ribs face toward said subfloor, thereby defining a multiplicity of elongated channels between said subfloor and said floor underlayment material.